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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/626,558	KOBAYASHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Blaise L Mouttet	2853	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to April 14, 2004.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 14 April 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>4/14/2004</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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***Additional Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Jinnai et al. US 4,313,123 discloses an electric field generator (9) for ejecting ink drops and an ink collector (22) that collects deflected ink droplets. While this structure is common to continuous type inkjet recording devices it is typically used to deflect ink drops not to be placed on a recording media from ink drops intended to be printed on the recording media during continuous drop ejection (as opposed to the selective ejection used in the drop on demand type of inkjet recording devices or a deflection between refresh drops and print (i.e. recording) drops.)

Watanabe US 4,866,462 discloses a drop on demand inkjet recording device that changes the maximum frequency of operation based upon the type of data to be printed.

Lund et al. US 5,659,342 discloses an inkjet recording device which interleaves refresh ink ejection with printing ink ejection by ejecting the refresh droplets on the page.

Morita et al. US 6,033,050 discloses changing a refresh ejection frequency in an inkjet recording device according to ambient conditions (humidity, temperature).

***Related Art***

Kobayashi et al. US 6,679,586 is a related patent issued to the inventive entity of the current application (i.e. not by another) which has been considered in terms of

double patenting. The "changing unit" and related limitations claimed in the current application are not claimed in the '586 patent and are not found to be obvious over the claims of the '586 patent.

### **REASONS FOR ALLOWANCE**

As indicated by the noted prior art, portions of applicant's claim limitations are found in the prior art. The electric field generator and ink collector structure is associated with continuous type ink ejectors to deflect non-print ink drops from printing ink drops. The prior art teaches frequency changing within drop on demand (i.e. selective ejection) ink ejectors. However a combination of these limitations resulting in the claimed limitations is not obvious to a person of ordinary skill in the art at the time of the invention given the prior art of record at least because 1) there is no motivation to combine the different inkjet types (continuous vs. drop on demand) so as to result in the present claims, 2) while frequency changing is known to the art for a variety of reasons such as to compensate for humidity/temperature changes or depending on the type of data to be printed the frequency changing units do not generate a refresh ejection signal during a frequency changing period wherein a refresh ink droplet is ejected in response to the refresh ejection signal which is deflected by an electric field generator into an ink collector.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Blaise Mouttet who may be reached at telephone number (571) 272-2150. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, Art Unit 2853, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Blaise Mouttet February 3, 2005

*Blaise Mouttet* 2/3/2005

  
LAMSON NGUYEN  
PRIMARY EXAMINER  
2/04/05